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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,533	03/19/2004	Yong-gi Kim	P2154US	7542

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EXAMINER	
KHAN, USMAN A	

ART UNIT	PAPER NUMBER
2622	

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09/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/804,533	KIM ET AL.	
	Examiner	Art Unit	
	Usman Khan	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2004 and 10 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/11/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

Election/Restrictions

Applicant's election with traverse of claims 1 - 22 in the reply filed on 7/10/2007 is acknowledged. The traversal is on the ground(s) that the restricted claims are directed to various embodiments of the same invention, not different inventions. This is found persuasive, hence the restriction requirement is withdrawn and all of the pending claims will be examined.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 07/11/2005 has been considered by the examiner. The submission is in compliance with the provisions of 37 CFR 1.97.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 - 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Pavley (US patent No. 6,445,460).

Regarding **claim 1,** Pavley teaches a method of concealing image information in a digital camera (column 5 lines 25 - 45) comprising:

photographing an image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; image capturing device); digitizing the photographed image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; digital image capture);

storing the digitized image (column 1 lines 37 – 50; stores digital images);

determining whether to conceal image information acquired during photographing of an image using the digital camera (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden);

assigning a password to an image to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

setting concealment to the image to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

and not displaying the image set to be concealed when the camera is in an image reproduction mode (column 5 lines 25 – 45; a hidden file attribute provides a

privacy feature that allows certain image files to be hidden and requires a password to access the file).

(Note: the method claim does not clearly outline the sequential steps (i.e. first step, second step, etc.) comprised therefor the examiner can take the comprised limitations in any order).

Regarding **claim 2**, as mentioned above in the discussion of claim 1, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 1, further comprising: if image concealment is not set before an image is photographed, determining whether to conceal the image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden; also column 3 line 64 – column 4 line 42 review mode), the determination occurring while the image is displayed in the reproduction mode after photographing (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden); setting concealment to the image set to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); assigning a password to the image set to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and not displaying the image set to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 3**, as mentioned above in the discussion of claim 2, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 2, further comprising: determining if an option for displaying information on the image set to be concealed has been selected (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file; also column 3 line 64 – column 4 line 42 review mode); allowing a password to be input (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); finding the image set to be concealed if the assigned password matches the input password (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and displaying the found concealed image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 4**, as mentioned above in the discussion of claim 2, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 2, wherein a user determines whether to set concealment of image information by directly setting an application marker included in an Exif header in an Exif file format (figures 4 and 5; item 1000 included in item 825 of header file 835 in figure 4).

Regarding **claim 5**, as mentioned above in the discussion of claim 1, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 1, further comprising: determining if an option for displaying information on the image set to be concealed has been selected (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file; also column 3 line 64 – column 4 line 42 review mode); allowing a password to be input (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); finding the image set to be concealed if the assigned password matches the input password (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and displaying the found concealed image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 6**, as mentioned above in the discussion of claim 5, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 5, wherein the option for displaying information on the image set to be concealed is selected by selecting a concealed-image-view menu item (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files

to be hidden and requires a password to access the file; also column 3 line 64 – column 4 line 42 review mode; also column 2 lines 48 – 63 menu).

Regarding **claim 7**, as mentioned above in the discussion of claim 1, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 1, wherein a user determines whether to set concealment of image information by directly setting an application marker included in an Exif header in an Exif file format (figures 4 and 5; item 1000 included in item 825 of header file 835 in figure 4).

Regarding **claim 8**, as mentioned above in the discussion of claim 1, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 1, wherein the digitized image is stored on a memory card (figure 1 item 354 removable memory).

Regarding **claim 9**, as mentioned above in the discussion of claim 1, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 1, further comprising: determining whether the camera is in an image reproduction mode (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file; also column 3 line 64 – column 4 line 42 review mode; also column 2 lines 48 – 63 menu).

Regarding **claim 10**, as mentioned above in the discussion of claim 9, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 9, further comprising:

photographing an image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; image capturing device);

digitizing the photographed image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; digital image capture);

and storing the digitized image (column 1 lines 37 – 50; stores digital images).

repeating the steps of determining whether to conceal image information acquired during photographing of an image using the digital camera (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden);

assigning a password to an image to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

setting concealment to the image to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

if the camera is not in an image reproduction mode (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

(Note: the method claim does not clearly outline the sequential steps (i.e. first step, second step, etc.) comprised therefor the examiner can take the comprised limitations in any order).

Regarding **claim 11,** Pavley teaches a method of concealing image information in a digital camera comprising:

photographing an image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; image capturing device); digitizing the photographed image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; digital image capture);

storing the digitized image (column 1 lines 37 – 50; stores digital images);

determining whether to conceal image information acquired during photographing of an image using the digital camera (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden);

assigning a password for setting image information concealment of the digital camera (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

setting concealment to the image to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

and not displaying the image set to be concealed when the camera is in a reproduction mode (column 5 lines 25 – 45; a hidden file attribute provides a privacy

feature that allows certain image files to be hidden and requires a password to access the file).

(Note: the method claim does not clearly outline the sequential steps (i.e. first step, second step, etc.) comprised therefor the examiner can take the comprised limitations in any order).

Regarding **claim 12**, as mentioned above in the discussion of claim 11, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 11, further comprising: if image concealment is not set before an image is photographed, determining whether to conceal the image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden; also column 3 line 64 – column 4 line 42 review mode), the determination occurring while the image is displayed in the reproduction mode after photographing (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden); setting concealment to the image set to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and not displaying the image set to be concealed (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 13**, as mentioned above in the discussion of claim 11, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 11, wherein a user determines whether to set concealment of image information by directly setting an application marker included in an Exif header in an Exif file format for a digital camera (figures 4 and 5; item 1000 included in item 825 of header file 835 in figure 4).

Regarding **claim 14,** Pavley teaches a method of concealing image information in a digital camera comprising:

photographing an image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; image capturing device);

digitizing the photographed image (column 1 lines 37 – 50, column 2 lines 14 – 47, and column 3 lines 64 *et seq.*; digital image capture);

storing the digitized image in a concealment folder (column 1 lines 37 – 50; stores digital images);

determining whether to conceal image information acquired during photographing of an image using the digital camera (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden);

assigning a password for setting image information concealment of the digital camera (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file);

and not displaying the image stored in the concealment folder when the camera is in a reproduction mode (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 15**, as mentioned above in the discussion of claim 14, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 14, further comprising: if image concealment is not selected before an image is photographed, determining whether to conceal the image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden; also column 3 line 64 – column 4 line 42 review mode), the determination occurring while the image is displayed in the reproduction mode after photographing (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden); moving the image set to be concealed to the concealment folder and storing the image in the concealment folder (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and not displaying the image stored in the concealment folder (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 16**, as mentioned above in the discussion of claim 14, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 14, further comprising: determining if an option for displaying information on the image chosen to be concealed has been selected (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file; also column 3 line 64 – column 4 line 42 review mode); allowing a password to be input (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); searching the concealment folder and finding the image set to be concealed if the assigned password matches the input password (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and displaying the found concealed image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 17**, as mentioned above in the discussion of claim 15, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the method of claim 15, further comprising: determining if an option for displaying information on the image chosen to be concealed has been selected (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file; also column 3 line 64 – column 4

line 42 review mode); allowing a password to be input (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); searching the concealment folder and finding the image set to be concealed if the assigned password matches the input password (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file); and displaying the found concealed image (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 18,** Pavley teaches a digital camera (column 5 lines 25 - 45) capable of concealing image information (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden) comprising: a main body having a lens portion and a display portion (figures 2A and 2B); a shutter installed at one side of the main body (figures 2A and 2B); a concealment setting input portion installed at one side of the main body (figures 1, 2A, and 2B) that allows a user to determine whether to set concealment of image information by directly setting an application marker (figure 1 item 404; figure 2A items 412, 414, and 416; and figure 2B items 422, 424 and 420; also figure 7 user sets desired rules) included in an Exif header in an Exif file format (figures 4 and 5; item 1000 included in item 825 of header file 835 in figure 4).

Regarding **claim 19**, as mentioned above in the discussion of claim 18, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the digital camera of claim 18, further comprising: a password input portion to input a password for concealment setting (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 20,** Pavley teaches a digital camera (column 5 lines 25 - 45) capable of concealing image information (column 5 lines 25 – 45; a hidden file attribute provides a privacy feature that allows certain image files to be hidden) comprising: a main body having a lens portion and a display portion (figures 2A and 2B); a shutter installed at one side of the main body (figures 2A and 2B); a concealment setting input portion installed at one side of the main body (figures 1, 2A, and 2B) to store an image set to be concealed in a concealment folder in a storage medium (figure 1 item 354 removable memory).

Regarding **claim 21**, as mentioned above in the discussion of claim 20, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the digital camera of claim 20, further comprising: a password input portion to input a password for concealment setting (figure 1 item 404; figure 2A items 412, 414, and 416; and figure 2B items 422, 424 and 420; also figure 7; also column 5 lines 25 – 45; a hidden file

attribute provides a privacy feature that allows certain image files to be hidden and requires a password to access the file).

Regarding **claim 22**, as mentioned above in the discussion of claim 20, Pavley teaches all of the limitations of the parent claim. Additionally, Pavley teaches the digital camera of claim 20, wherein the storage medium is a memory card (figure 1 item 354 removable memory).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ohmura (US patent No. 6,963,363) teaches that a method of canceling creation images in a camera using a password.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Usman Khan
09/21/2007
Patent Examiner
Art Unit 2622

DAVID OMETZ
SUPERVISORY PATENT EXAMINER